

Edoardo Maria Ponti

Curriculum Vitae



Professional Experience

- Aug 2022 - now **Assistant Professor, Natural Language Processing**, University of Edinburgh.
- Oct 2022 - now **Affiliated Lecturer**, University of Cambridge.
- Jun 2024 - Jun 2025 **Visiting Professor**, NVIDIA.
- Apr 2022 - Jul 2022 **Visiting Postdoctoral Scholar**, Stanford University.
- Oct 2020 - Jul 2022 **Postdoctoral Fellow**, Mila – Quebec AI Institute and McGill University.
- Jul 2019 - Sep 2019 **AI / ML Research Intern**, Apple, Cupertino.

Education

- Oct 2016 - Sep 2020 **PhD, Computational Linguistics**, University of Cambridge.
Supervisors: Prof. Anna Korhonen and Dr. Ivan Vulić.
Thesis: *Inductive Bias and Modular Design for Sample-Efficient Neural Language Learning*.
Student of St John's College.
- Oct 2014 - Jul 2016 **Master, Theoretical and Applied Linguistics**, University of Pavia.
Thesis: *Identifying Causal Relations between Events with Artificial Neural Networks*.
110/110 with distinction and publication recommended (extremely rare).
Student of Collegio Ghislieri. Erasmus exchange: University of Cambridge.

Grants

- Jul 2025 **ERC Starting Grant**, €1.5M.
Project: *Adaptive Tokenization and Memory in Foundation Models for Efficient and Long-Horizon AI*. Recipients: me (PI).
- Mar 2025 **ARIA Scaling Compute**, £2M.
Project: *Tracking Evolving AI Compute*. Recipients: me (PI), Nick Brown, Adrian Jackson, Boris Grot, Wenda Li, Luo Mai, and Aaron Zhao.
- Oct 2022 **Edinburgh Laboratory for Integrated Artificial Intelligence**, £100K.
Project: *Gradient-based Learning of Complex Latent Structures* (ongoing)
Recipients: Pasquale Minervini, Antonio Vergari, and me (co-PI).
- Mar 2019 **Google Faculty Research Award**, \$61K.
Project: *Automatic Induction and Adaptation of Syntactic Structures for Improved Cross-Lingual NLP* (funded the 4th year of my PhD)
Recipients: Anna Korhonen (PI), Roi Reichart, Ivan Vulić, and me (principal scientist).

Gifts

- Dec 2025 **NVIDIA gift**, 32K A100 GPU-Hours, Project: *Permanent Memory in Transformers via Logarithmic Growth*.
- Sep 2025 **Google DeepMind gift**, \$90K funds and \$100 Gemini credits, Project: *Multicultural Evaluation of World Models*.
- Jan 2025 **NatWest gift**, £200K, Project: *Expressive Multi-token Prediction*.

Awards

- July 2025 **2 Highlights Awards**, ACL 2025.
Papers: *The Cross-linguistic Role of Animacy in Grammar Structures* and *Mixtures of In-Context Learners*
- July 2023 **Candidate for Best Paper Award**, ACL 2023.
Paper: *Efficient Transformers with Dynamic Token Pooling*
- Oct 2021 **Best Paper Award**, EMNLP 2021.
Paper: *Visually Grounded Reasoning across Languages and Cultures*
- Aug 2019 **Best Paper Award**, Repl4NLP 2019.
Paper: *Specializing Distributional Vectors of All Words for Lexical Entailment*
- Feb 2022 **IVADO Postdoctoral Fellowship**.
- Feb 2021 **ETH Zurich AI Centre Postdoctoral Fellowship**, (declined).
- Jun 2017 **Parsons Fund**, St John's College, University of Cambridge.
- Jun 2017 **Robert Sloley Award**, St John's College, University of Cambridge.
- Dec 2016 **Young Researcher Best Paper Award**, 3rd Italian Conference of Computational Linguistics.
- 2016 **Self-placed Fulbright Scholarship**, (declined).
- Sep 2011 - Jul 2016 **Institute for Advanced Study Scholarship**, University of Pavia.
- 2014 **Collegio Ghislieri Scholarship**, University of Pavia.
Best student in contest.

Teaching Experience

Lecturer

- 2022 - 2024 **Accelerated Natural Language Processing**, University of Edinburgh.
Nominated twice as best course for Informatics by the Students' Association.

Guest Lecturer

- Feb 2022 **Computational Linguistics**, University of Cambridge.
- Feb 2022 **Natural Language Understanding with Deep Learning**, McGill University.

Supervisor

- Oct 2017 - May 2020 **Computational Linguistics**, University of Cambridge.

- Demonstrator
- Oct 2017 - May 2018 **Machine Learning and Real-world Data**, University of Cambridge.
- Main PhD Supervisor
- PhDs**, Piotr Nawrot, Nina Gregorio, Osman Batur Ince, Farid Adilazuarda.
- Summer Schools
- Jul 2017 **Generative Lexicon: Integrating Theoretical and Distributional Methods**, Materials for the course at ESSLLI 2017.
- Tutorials
- Dec 2024 **Dynamic Sparsity in Machine Learning**, Tutorial at NeurIPS 2024 with André Martins.
- May 2022 **Natural Language Processing for Multilingual Task-Oriented Dialogue**, Tutorial at ACL 2022.

Conference Organisation

- 2024 **Workshop on Efficiency in Generative AI**, *GAIL*, Edinburgh.
- 2022 **Workshop on Multilingual Multimodal Learning**, ACL 2022.
- 2019 - 2021 **Workshop on Research in Computational Typology and Multilingual NLP (SIGTYP)**, co-located with *ACL conferences between 2019 and 2025.
- Oct 2018 - Dec 2019 **Cambridge LTL Seminar Series**, coordinator.
- Oct 2019 **Conference ‘Science, Policy, and the Public’**, St John’s College.
- Feb 2019 **St John’s College Graduate Symposium**, University of Cambridge.
- Dec 2014 **Conference ‘Compter, Parler, Soigner: Between Linguistics and Artificial Intelligence’**, Collegio Ghislieri.

Service

- 2023 - 2024 **Member of the Regent House**, University of Cambridge.
- 2023 - 2024 **Coordinator of NLP Curriculum Review**, University of Edinburgh.
- Publicity/Sponsorship Chair**, CoNLL 2018.
- Program Co-Chair Assistant**, ACL 2019.
- Editor**, *TACL*, *ACL Rolling Review*.
- Reviewer and Area Chair**, *ACL*, (twice **Outstanding Reviewer**), *EMNLP*, *NAACL*, *EACL*, **SEM*, *AAAI*, *NeurIPS*, *ICML*, *Artificial Intelligence*, *Natural Language Engineering*, *Language Resources and Evaluation*.
- Co-founder and Committee Member**, *ACL Special Interest Group on Typology (SIGTYP)*.
- Scholar of ELLIS**, *European Laboratory for Learning and Intelligent Systems*.